REMARKS

In the Final Office Action, the Examiner rejected claims 1 and 3/1, and objected to claims 2 and 3/2 for relying on a rejected parent claim. Applicant respectfully thanks the Examiner for indicating the allowable subject matter of claims 2 and 3/2. By the present response, Applicant amends claim 1.

Rejections under 35 U.S.C. § 103

In the Final Office Action, the Examiner rejected claims 1 and 3 under 35 U.S.C. § 103(a) as being unpatentable over the Mann reference (U.S. Patent No. 5,828,793) in view of the Krymski reference (U.S. Patent No. 7,209,166). Specifically, the Examiner remarked:

> Mann discloses a method of creating an image with a still video camera (col. 11 lines 43-46, figure 8, element 202). Mann further teaches that the image is transferred to a computer to be stored on a main memory 210 represented as 212_1, 212_2, 213_3 etc. (col. 11 lines 46-54). Mann also teaches that the composite images [are] formed from a series of input images wherein every pixel of the composite image is drawn from the corresponding pixel in each of the input source images according to a weighted average. The weighting is based on a certainty function associated with each source image pixel corresponding to an output pixel in the final composite image. The value of the relevant pixel parameter for a given final-image pixel (weighted average of n samples) is given by
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> $$\sum_n c_n P_n / \sum_n c_n$$
>
> where c_n is the certainty function associated with the corresponding pixel of each source image n (col. 6 line

51-col. 7 line 8). It is noted that P_n (pixel parameter) is dependent upon exposure time, brightness or luminance and the gain of the system. Mann teaches that the resulting pixel image represented by the expression above is saved in a target buffer 250 whose contents are shown on screen display 234 (col. 12 lines 32-49). The features such as gamma correction (other image data) are also stored in the target image data (col. 13 lines 4-8).

Mann fails to teach explicitly obtaining a substantially linear representation of the image by combining two images. However[,] Krymski teaches to write the image signal into the memory twice, first after [a] short integration and then after [a] long integration. Thus, after two operations of sampling, the result[ing] voltage in the memory will be a linear superposition of the two signals representing [the] bright and [the] dark image (Col. 3 lines 2-9, figures 1 and 3). Fig. 4 clearly teaches that [the] combined signal is a substantial linear representation of the brightness (light intensity) of the image [acquired] by combining two images. It is noted that [] in order to obtain a wide dynamic range image the two long and short exposure images are combined so that the final image provides increased highlight detail despite the limited response of the system that produced the component images[.]

Therefore[,] taking the combined teachings of Mann and Krymski, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have obtained a substantially linear representation of the image by summing two images in order to obtain a wide dynamic range image so that the final image provides increased highlight detail despite the limited response of the system that produced the component images.

[Claim 3/1]

Mann teaches that the different images are color so that the offset will be color dependent (col. 13 lines 21-30).

Final Office Action, pages 3-5.

In the Response to Arguments section of the Final Office Action, the Examiner stated the following:

> Applicant argues with regards to claim 1 that the meaning of "a linear response" as the recitation would be understood by one or ordinary skill in the art. Present embodiments are directed to producing a response to light intensity that is linear over its whole range: that is, if one plotted it, the graph would be a single straight line through the origin. The only reason the term "substantially" linear is used is because there are bound to be minor imperfections due to noise (in the "real world"). The Examiner respectfully disagrees.
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> Krymski teaches in figure 4 that the combination is a straight line representation. Even though the combination shows two different straight lines, each part of the line is individually linear. Therefore[,] the claimed recitation "output is substantial linear representation of the brightness of an image" is taught in Krymski. [The] Krymski reference teaches obtaining a substantial linear representation of the brightness of an image after the images are combined. Applicant is arguing "Present embodiments are directed to producing a response to light intensity that is linear over its whole range: that is, if one plotted it, the graph would be a single straight line through the origin" and not claiming this. As suggested by the Examiner in the previous action the applicant should claim the invention to cover the fact that the image is linear for the whole range of brightness values in order to overcome Krymski's reference. The term "linear response" as applicant has argued is not necessarily the only definition understood by one skilled in the art. Even in the applicant's specification, the term "linear response" has not been defined or explained. Therefore one skilled in the art is free to interpret the term "linear response" as taught by Krymski.
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> Final Office Action, pages 2-3 (emphasis in original).

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). However, it is not enough to show that all the elements exist in the prior art since a claimed invention composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). It is important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id.* Specifically, there must be some articulated reasoning with a rational underpinning to support a conclusion of obviousness; a conclusory statement will not suffice. *In re Kahn,* 441 F.3d 977, 988 (Fed. Cir. 2006). Indeed, the factual inquiry determining whether to combine references must be thorough and searching, and it must be based on *objective evidence of record*. *See In re Lee,* 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002).

In accordance with the Examiner's comments in the Final Office Action, Applicant has amended claim 1 to place the application in condition for allowance. Specifically, Applicant has amended claim 1 based on the Examiner's suggestion that "the applicant should claim the invention to cover the fact that the image is linear for the whole range of brightness values in order to overcome Krymski's reference." Final Office Action, page 2. Indeed, as amended, claim 1 now recites, *inter alia*, "obtaining a

representation of the brightness of an image, said representation being linear over the whole range of brightness." (Emphasis added).

Accordingly, in view of the present amendment and the remarks set forth above, Applicant believes claims 1-3 to be in condition for allowance. Thus, Applicant requests that the Examiner withdraw the rejection of claims 1 and 3/1. Further, in view of the amendment to claim 1, Applicant asserts that claims 2 and 3/2 now depend from an allowable base claim and, thus, request that the objection to claims 2 and 3/2 be withdrawn. Additionally, Applicant requests that the Examiner provide an explicit indication of allowance for claims 1-3.

Conclusion

The Applicant respectfully submits that all pending claims are in condition for allowance. However, if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

In accordance with 37 C.F.R. § 1.136, Applicant hereby provides a general authorization to treat this and any future reply requiring an extension of time as incorporating a request thereof.

Respectfully submitted,

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